Drinking Water Quality Institute
April 29, 2014 Meeting Minutes
New Jersey Environmental Infrastructure Trust Building
Princeton Pike, Lawrenceville, NJ

Members Present:

Keith Cooper (Chair)	Anthony Matarazzo	Sheng-Lu Soong
Laura Cummings	Norman Nelson	Carol Storms
Jessie Gleason	Bahman Parsa	George Van Orden
Judith Klotz	Gloria Post	
Sandra Krietzman	Fred Sickels	

Members Absent: Environmental Health Expert, Senate – vacant
Environmental Health Expert, Assembly – vacant

Non-members Present:
Alison Reynolds (NJDOLPS)
Linda Bonnette, Kati Wessling, Karen Fell (NJDEP-Division of Water Supply)
Gary Buchanan, Judy Louis, Sandra Goodrow, Tom Belton (NJDEP-Office of Science)
Jerald Fagliano, Somia Aluwalia (NJDOH)
Tracy Carluccio, Ed Rodgers (Delaware Riverkeeper Network);
Bill Wolfe (New Jersey Public Employees for Environmental Responsibility)
Angelo Fichera (Philadelphia Inquirer)
Dawn Prandi (Somerset County Health Department)
Steve Chranowski (Chemistry Council of NJ)
Jennifer Coffey (Stony Brook-Millstone Watershed Association)
Mark Cuker (Williams-Cuker Berezotsky)
Thomas Fikslin (Delaware River Basin Commission)
Jon Hurdle (NJ Spotlight)
Harvey Klein (Garden State Environmental Laboratory)
Barker Hamill
Perry Cohn
Mary-Anna Holden, Marie Zazzera (NJBPU)
Harvey Klein (Garden State Laboratories, Inc.)
Pete Zimmermann, (Integral Consulting)
Christie Duffy (NJTV)

1. Call to Order, Welcome and Introductions—K. Cooper

Chairman Cooper called the meeting to order just after 1:00 pm. Chairman Cooper briefly reminded the members and the attendees that the DWQI's charge was to evaluate the data and the science surrounding drinking water quality. He noted that he would strictly adhere to this principle and noted that policy discussions would have to occur elsewhere. He also requested that questions be held until the end of today's presentations, in order to keep the meeting moving along. During the public comment period, commenters would be asked to limit their comments to five minutes each.

2. Minutes from September 10, 2010— K. Cooper

Chairman Cooper asked that the members review the previous meeting minutes. G. Post noted that she had already forwarded minor editorial corrections to the Division of Water Supply &

Geoscience (DWSG). F. Sickels made a motion to approve the minutes, which was seconded by C. Storms. A show of hands indicated that all were in favor of accepting the September 10, 2010 meeting minutes.

3. Status of DWQI Recommendations – S. Krietzman

In 2009, the DWQI wrote two documents: "Recommendations for Hazardous Contaminants in Drinking Water" and the "Maximum Contaminant Level Recommendation Document on Radon-222." Both documents were submitted to the Department.

Recommendations put forward in these two documents included:

1. Review of 34 existing State MCLs based on more recent data, analytical techniques and treatment advances. As a result: 13 MCLs were recommended to be increased, 8 to be decreased and 13 would remain the same.

2. New MCLs for seven contaminants. Four MCLs were for contaminants listed in the NJSDWA; three new MCLs for dacthal, radon and 1,2,3-trichloropropane (1,2,3-TCP).

In 2009, the DWSG began drafting amendments to the NJSDWA rules (N.J.A.C. 7:10), as the rules were scheduled to sunset in early 2010. These proposed amendments included numerous changes in the operation and maintenance of water systems, water system construction standards, and clarifications to the NJSDWA rules in addition to revisions to the MCLs. As the sunset date for the rules quickly approached, the DWSG realized that all the anticipated rule changes could not be completed by early 2010, and therefore the Department of Environmental Protection readopted the NJSDWA rules without change. Due to increased urgency for other DWSG program rules, NJSDWA rulemaking was set aside. In 2012, the Commissioner was briefed on the status of the MCLs at which time he asked NJDEP staff for additional information on options for the regulation of radon and 1,2,3-TCP including a cost-benefit analysis. This analysis for radon is still underway and will be followed by a cost-benefit analysis for 1,2,3-TCP. The NJDEP response to Hurricanes Irene and Sandy diverted resources to other priorities and the rulemaking was delayed.

Comments/Questions:

A question was asked regarding the statutory authority to analyze the impacts, specifically cost, of new standards. S. Krietzman clarified that the cost-benefit analysis referred to was not a DWQI undertaking, rather she was reporting on the status of NJDEP action since the 2009 DWQI recommendations were received. Cost is a NJDEP concern when proposing regulations.

Attendees requested that printed versions of the agenda available at the meetings and that a membership list be posted on the web. It was also asked whether all the DWQI members could vote, how many members were new, and why the DWQI had not met in more than three years. Finally, an attendee asked about the lack of meetings in the past three years.

K. Cooper responded to these questions by stating that printed agendas will be provided and a list of members will be posted. He advised the attendees that all members can vote. With regard to the past few years, he noted that a combination of needing to get appointments filled and

several natural disasters had affected the ability to meet. He also noted that as Chair, it was his intention to hold meetings at least every four months. In addition, he indicated that while the DWQI had not met, important work at NJDEP and with the water systems had continued and would serve as the groundwork for moving forward.

4. Commissioner's Direction on DWQI Workplan – F. Sickels

F. Sickels discussed the NJDEP Commissioner's direction to the DWQI regarding their work plan. The Commissioner has directed DWQI to establish a work plan for the development of recommendations for health-based MCLs for perfluorononanoic acid (PFNA), perfluorooctanoic acid (PFOA), and perfluorooctane sulfonic acid (PFOS), in that priority order. The Commissioner also directed the DWQI to consider occurrence data in public water systems and data on health effects and human and environmental persistence, and after determining a health based MCL, to undertake an assessment of treatment and analytical issues in order to provide MCL recommendations to the Department for consideration for adoption. To that end, the Safe Drinking Water Program and the Office of Science will post this list of priority contaminants and request information from the public, universities, private institutions, non-governmental organizations and industry to assist in the development of standards. Collected information will be forwarded to the DWQI.

5. Presentation of Work to Date on PFNA and PFOA – G. Post

G. Post provided a presentation entitled "DEP & DWQI Work to Date on Perfluorinated Chemicals (PFCs)" which is available at http://www.state.nj.us/dep/watersupply/pdf/dep-dwqi-work-to-date-pfoa20140429.pdf

The presentation included a brief overview of background information on perfluorinated chemicals (PFCs) as drinking water contaminants, a chronology of DWQI and DEP work on PFCs in drinking water from 2006 to the present time, a summary of data from the two NJDEP studies (2006 and 2009) of occurrence of PFCs in NJ public drinking water systems, a summary of NJ and national Unregulated Contaminant Monitoring Rule 3 PFC data reported so far, data on treatment removal of PFCs from NJ public drinking water systems, and the current status of DEP work on PFNA (guidance for infants up to one year old in Paulsboro; draft Interim Specific Ground Water Criterion and Practical Quantitation Level out for public comment). Many individuals from DEP, DWQI, and Department of Health (DOH) contributed to this work.

Comments/Questions:

It was asked whether the higher occurrence frequency of PFOA and PFNA in the UMCR3 in New Jersey compared to nationally could be explained by a lower analytical Reporting Level in NJ than nationally. G. Post explained that the NJ and national UCMR3 data are based on the same Reporting Levels, so that the higher occurrence in NJ is not due to a lower Reporting Level. It was asked whether there were any conclusions regarding health threats to public from the PFCs that had been detected in NJ public water systems. G. Post replied that conclusions about potential health impacts are included in the publications co-authored by DEP, DOH, and Rutgers staff, and that the NJDOH had issued a health advisory for infants up to one year old for the Paulsboro Water Department based on PFNA levels found. DEP has also developed a chronic health-based drinking water guidance level of 0.04 ug/L (40 ng/L) for PFOA, and the DWQI will develop further conclusions about levels of PFCs that may present a health risk.

A member of the audience also asked if the data in the presentation will be used by the DWQI to recommend an MCL; in other words, what are the next steps? Another noted that he found the slide on granulated activated carbon treatment to be the most significant and hoped that it would compel a requirement to treat. K. Cooper responded that one reason PFCs are being evaluated at all is because of the number of detects and that these data are a starting point. He also agreed that it was significant that we know that treatment that can remove PFCs is available and stated that we need to build on the data by looking at health effects, testing, and treatment together.

6. Subcommittee Descriptions

S. Krietzman provided descriptions of the three Subcommittees that were formed shortly after the creation of the DWQI in 1985 to provide technical input to the DWQI. The Subcommittees are comprised of DWQI members.

The Health Effects Subcommittee is responsible for recommending health based levels for the contaminants listed in the 1984 amendments to the NJ Safe Drinking Water Act, and for additional contaminants selected based on potential health effects and occurrence in New Jersey drinking waters. For carcinogenic contaminants, the statutory goal is to establish a standard which would not, within the limits of medical, scientific and technological feasibility, permit cancer in more than one-in-one million persons ingesting the contaminant over a lifetime (70 years). For noncarcinogens, the statutory goal is to establish a standard, which would not result in any adverse physiological effects following ingestion for a lifetime, within the limits of practicability and feasibility.

The Testing Subcommittee is responsible for assessing the occurrence of contaminants in New Jersey drinking water sources and appropriate analytical methods to measure concentrations of contaminants in drinking water as close to the health based levels as possible and for developing appropriate practical quantitation limits and monitoring frequencies.

The Treatment Subcommittee is responsible for evaluating the best available treatment technologies for removal of the regulated contaminants from drinking water, as well as for overall program review. The Treatment Subcommittee also evaluates the costs of treatment to water systems.

K. Cooper noted that subcommittee membership was being established.

7. New Process for Public Input

G. Buchanan described the new process for public input into MCL development that has been developed by DEP. The process includes two new opportunities for public input. First, the chemicals that the DWQI is evaluating will be posted with a request for the public to submit relevant data. Second, DWQI recommendation documents will be posted online, and there will be an opportunity for written and oral comments before the DWQI votes on the documents.

Comments/Questions:

A member of the audience noted that the stakeholder process that was mentioned in the flowchart is, in his experience, by invitation only, and therefore is not transparent. K. Cooper indicated that this comment related to an NJDEP matter and was beyond the scope of the

DWQI, but that his comments would be noted in the minutes. He also noted that the subcommittee meetings would include stakeholders that are invited to present.

8. Public Comment

T. Carluccio indicated that she was glad to see the DWQI meeting and noted that there have been no new MCLs or standards adopted since this important agency was shut down. She was concerned that there were toxic contaminants being considered at the time the DWQI last met, and now four years had passed with no progress. She is heartened to hear that the 2009-10 (PFC) report is being posted. She would like the NJDEP to have meetings in affected communities to explain what the data mean for them. This will allow them the opportunity to make informed decisions and personal choices to avoid exposure. As for the timeline, she is concerned that it will take too long to get to an MCL. She is glad that the DWQI will be taking input from the public but asks that progress in the Health Effects Subcommittee is not stopped while this happens. She is also concerned that special interests may delay the process, and asks for assurances that DEP does not allow this to happen. Finally, she noted that the Delaware Riverkeeper Network is firmly against the concept of individuals being allowed to present to closed (subcommittee) meetings.

K. Cooper noted that the subcommittees do not need to meet in sequential order. Where work has been done, and the DWQI knows what works, the DWQI can move forward. He also noted that he is committed to preventing anyone from subverting the system, and that he will set discrete timeframes.

H. Klein noted that recent research published in the journal Environmental Health showed that decreased IQ in school children in Maine is associated with arsenic levels in drinking water of 5 ppb or higher. He said that these findings proved that New Jersey's decision to adopt the most stringent arsenic standard (5 ppb) in the nation was the right one. He also noted that in 2005, the DWQI recommended a 5 ppb perchlorate standard that was not adopted. He has more than 200 results for perchlorate in NJ drinking water from his lab; the highest was 38 ppb. He strongly recommended that DWQI re-examine and recommend that NJDEP adopt a 5 ppb MCL for perchlorate.

T. Fikslin asked if the DWQI is aware of the new exposure assumptions recommended by USEPA for drinking water consumption (3 liters per day, instead of the older value of 2 L per day). Will the new recommended value be used by the DWQI in developing MCLs? Is the most stringent MCL for adults?

G. Post replied that a lifetime exposure (chronic) is usually used for developing MCLs. However when appropriate, different exposure assumptions and endpoints for specific portions of the population – e.g. pregnant women or infants are used. Relative source contribution (e.g. drinking water exposure) of 20% is most often used for developing MCLs. She also noted that an MCL based on drinking water consumption of an infant or child is more stringent than for an adult. Finally, she noted that DEP is aware of the new EPA recommendations for drinking water consumption (3 L/day instead of 2 L/day), and that assumed adult body weight has also changed. The DWQI will consider whether to use these new exposure assumption values in developing MCL recommendations.

P. Cohn noted that one important value of DWQI is to avoid circumstances like the one that occurred recently in West Virginia when little toxicological information was available for the chemical that was released into the drinking water. It is good to have health-based toxicity values that can be put in place before such circumstances. He noted also that DWQI developed health-based drinking water values for MTBE and perchlorate in advance of USEPA. With regard to assessment of health effects of PFOA, he stressed the value of including many human epidemiology studies (e.g. Ohio and W. Virginia residents living near the DuPont plant that released PFOA, and Centers for Disease Control [CDC] NHANES [National Health and Nutrition Examination Survey] data on the U.S. population). He indicated that there was a fair amount of consistency across data for certain health effects. DWQI should use epidemiology in its risk assessments when available.

K. Cooper agreed that there is a rich amount of sound epidemiologic data for PFOA. He noted that New Jersey, being so densely populated, would have a high number of people exposed when contamination is present. Consequently, in his personal opinion, the conservative approach would not be inappropriate. New Jersey's high population density one reason why a strong DWQI is needed in New Jersey.

B. Wolfe indicated that he was very concerned regarding the status of previous DWQI recommendations (agenda item #3). He noted that the various DWQI recommendations (e.g. perchlorate, hazardous contaminants, and radon) have not been acted upon or adopted, and also that the DWQI has not addressed the issues of multiple unregulated contaminants found at low levels in drinking water discussed in the DEP white paper on unregulated contaminants in drinking water. He is also concerned with Chairman Cooper's comments that seem to narrow the scope of DWQI to a mere data evaluation role. He does not believe that this is the legal charge or professional responsibility of DWQI. He believes it would be irresponsible if the DWQI does not push NJDEP to adopt recommended MCLs and mandatory treatment, and that the science cannot be detached from the policy. He would also like to know the basis for selecting the PFCs that were chosen. He also asked the group to consider whether a conservative approach would work in the regulatory context we are in, that is one where Executive Order #2 (EO 2) is in effect. EO 2 hands off science to the regulatory process where a pre-proposal stakeholder process can determine to avoid anything burdensome.

K. Cooper stated that while it is up to DEP to make a policy decision whether or not to go forward with MCLs recommended by the DWQI, the DWQI can be a strong advocate for DEP going forward with the MCLs.

S. Chranowski welcomed new members and thanked the DWQI for convening. He noted that water quality standards are important and also guide the site remediation process and redevelopment as well. He is in support of and looks forward to open communication with DWQI.

9. Adjournment

Chairman Cooper brought the meeting to a close at 2:43 pm.

Minutes by K. Wessling 4/30/14